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# **WATER SUPPLY OUTLOOK FOR UTAH**



**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with

**UTAH STATE DEPARTMENT OF NATURAL RESOURCES  
-- DIVISION OF WATER RIGHTS**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF  
**OCT. 1, 1978**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.*

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.





# **WATER SUPPLY OUTLOOK FOR UTAH**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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# WATER SUPPLY OUTLOOK

SUMMARY  
as of  
October 1, 1978

\*\*\*\*\*  
\*\* Utah's 1977 water supply ranged from "below  
\*\* average" in Uintah Basin and for some users on  
\*\* the Sevier River to "above average" for most  
\*\* of the remainder of the state. May-July stream-  
\*\* flow, according to provisional measurements by  
\*\* the U.S. Geological Survey, was generally in  
\*\* the range forecast last spring. Carry-over  
\*\* reservoir storage as of October 1st was above  
\*\* average except in Uintah and Sevier Basins.  
\*\*  
\*\*\*\*\*

In contrast to a year ago when most of the state had an extremely low amount of snow water but was saved by summer rainfall in abundant amounts, this year produced adequate snow melt runoff but had very little runoff from summer rainfall. Summer temperatures were also above average for a longer period, causing additional water use.

Last year summer precipitation (July, August, and September) accounted for 25 to 60 percent of the total year's moisture. In contrast, this summer produced only 3 to 22 percent of the total annual moisture.

Reservoir storage as of October 1st in 19 major irrigation reservoirs was 114 percent of average, compared to 88 percent of average last year at this time. Reports indicate storage is very low in Moon Lake and Piute reservoirs and only about half average in Otter Creek and Sevier Bridge reservoir. A good snow pack will be needed this year to provide these reservoirs with an adequate water supply for next season.

Provisional streamflow from the Geological Survey indicates that last spring's May-July flows were close to the forecasts in most areas. Flows were generally less than forecast in the Uintah Basin, Sevier Basin, Ogden Basin, and more than forecast on the Beaver, Weber, and Bear Basins.

The following table shows a comparison of the forecasts made May 1st with provisional flow measured by the Geological Survey.

# WATER SUPPLY OUTLOOK

Station	Forecast Period	May 1 Forecast (1,000 A.F.)	Measured Flow for the Period (1,000 A.F.)
<u>BEAR RIVER</u>			
Bear nr Ut-Wyo. State Line	May-July	97	108.8
Bear nr Woodruff	May-July	100	110.9
Woodruff Ck nr Woodruff	May-July	12.5	14.7
Bear nr Randolph	May-July	70	48.8
Logan nr Logan	May-July	116	118.1
Blacksmith Fk nr Hyrum	May-July	40	33.6
Little Bear nr Paradise	May-June	20	16.8
<u>WEBER-OGDEN RIVERS</u>			
Weber nr Oakley	May-June	95	108.5
Chalk Creek at Coalville	May-June	18.5	30.4
East Cyn. Creek nr Morgan	May-June	17.2	24.8
South Fk Ogden nr Huntsville	May-June	42	42.5
Pineview Reservoir Inflow	May-June	95	75.5
<u>PROVO RIVER &amp; UTAH LAKE</u>			
American Fk nr American Fk	May-July	35	33.4
Strawberry Res. Inflow	May-July	57	50.2
<u>PRICE RIVER</u>			
Gooseberry Cr. nr Scofield	May-July	15.0	15.6
Scofield Res. Inflow	May-July	47.0	46.0
<u>JORDAN RIVER AND SALT LAKE</u>			
Big Cottonwood nr Salt Lake	May-July	39	37.7
Parley's Creek nr Salt Lake	May-July	11.5	16.1
<u>DUCHESNE RIVER</u>			
Currant Cr. nr Fruitland	May-July	21	15.0
Rock Creek nr Mountain Home	May-July	90	112.0
Lakefork below Moon Lake	May-July	63	67.0
Uinta nr Neola	May-July	76	68.1
Whiterocks nr Whiterock	May-July	50	46.5
Ashley nr Vernal	May-July	45	36.8
Flaming Gorge Inflow	Apr-July	1,342	1,470
<u>SAN RAFAEL RIVER</u>			
Huntington Cr nr Huntington	May-July	56	62.0
<u>UPPER COLORADO BASIN</u>			
Colorado nr Cisco, Utah	Apr-July	3,868	3,884
Green at Green River, Utah	Apr-July	3,733	3,560
Lake Powell Inflow	Apr-July	9,100	8,995
<u>SEVIER RIVER</u>			
Sevier nr Hatch	May-July	55	44.9
<u>BEAVER RIVER</u>			
Beaver nr Beaver	May-July	26	33.6



## SNOTEL STATUS REPORT

The Soil Conservation Service Snow Telemetry (SNOTEL) System is in operation. The 30 sites of Phase I and 10 sites of 28 on Phase II are in operation at this time. The second 10 radios on Phase II are expected to be installed by November 1st making a total of 50 sites on SNOTEL prior to this winter season.

Each of these data sites will transmit snow water equivalent, precipitation, and temperature twice daily automatically via meteor burst telemetry. More frequent data can be requested as needed.

The following table shows SNOTEL DATA SITES which are expected to be in operation this winter.

### BEAR BASIN

Bug Lake  
Franklin Basin  
Hayden Fork  
Little Bear Upper  
Monte Cristo R.S.  
Tony Grove Lake

### WEBER BASIN

Beaver Divide  
Chalk Creek #1  
Chalk Creek #2  
Farmington Upper  
Horse Ridge  
Parleys Summit  
Smith & Morehouse

### OGDEN BASIN

Ben Lomond Peak  
Ben Lomond Trail\*  
Dry Bread Pond

### PROVO BASIN

Trial Lake  
Timpanogos Divide

### SPANISH FORK BASIN

Clear Creek #1  
Clear Creek #2

### STRAWBERRY BASIN

Currant Creek  
Daniels-Strawberry Summit  
Strawberry Divide

### LAKE FORK CREEK BASIN

Brown Duck Ridge  
Lakefork Mountain #1

### ASHLEY CREEK BASIN

Kings Cabin Upper  
Mosby Mountain  
Trout Creek

### BLACKS FORK BASIN

Steel Creek Park

### PRICE BASIN

White River  
Indian Canyon

\*Phase II - Not yet installed.

SEVIER BASIN

Box Creek \*  
Castle Valley\*  
Farnsworth Lake\*  
Gooseberry R.S.  
Harris Flat\*  
Kimberly Mine\*  
Mammoth-Cottonwood  
Midway Valley\*  
Pickle Keg Springs  
Widtsoe Summit #3

BEAVER BASIN

Big Flat

VERNON CREEK BASIN

Vernon Creek

COTTONWOOD CREEK BASIN

Red Pine Ridge  
Seeley Creek R.S.

FERRON CREEK BASIN

Buck Flat

MUDDY CREEK BASIN

Dills Camp

VIRGIN BASIN

Kolob-Crystal  
Long Flat  
Webster Flat

The last 13 (Phase III) sites are planned to be installed next summer or fall making a total of 63 sites as planned at the present time.

Reports can be accessed on any one or any group of sites as requested. Data from these sites should provide water users up-to-date information to make better management decisions.

Requests for data should be directed to:

George McMillan  
State Conservationist  
Soil Conservation Service  
Rm. 4012, Fed. Bldg.  
125 South State  
Salt Lake City, Utah 84138

A dedication and demonstration of the SNOTEL SYSTEM will be held in December. Watch for the date to be announced in your local paper.

\*Phase II - Not yet installed

## RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

October 1, 1978

October 1, 1978

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
GREAT BASIN					
<u>Bear River</u>	Bear Lake	1421.0	959.7	787.5	985.9
	Woodruff Narrows	26.5	14.5	0.0	13.2
<u>Beaver River</u>	Minersville (RkyFd)	23.3	5.5	0.0	4.4
<u>Little Bear</u>	Hyrum	15.3	7.1	3.8	7.0
	Porcupine	11.3	1.1	0.6	2.0
<u>Ogden</u>	Causey	6.9	1.9	1.0	1.7
	Pineview	110.1	70.5	32.9	44.4
<u>Provo</u>	Deer Creek	149.7	9.4	57.0	92.4
<u>Settlement Creek</u>	Settlement Creek	1.2	0.4	--	--
	Vernon Creek	0.6	0.1	--	--
<u>Sevier River</u>	Gunnison	18.2	3.7	0.0	2.7
	Otter Creek	52.5	8.3	6.2	14.6
	Piute	71.8	0.0	4.7	13.6
	Sevier Bridge	236.0	23.2	37.7	41.9
<u>Spanish Fork</u>	Strawberry	270.0	150.2	136.6	107.9
<u>Utah Lake</u>	Utah Lake	883.9	628.3	505.6	438.9
<u>Weber</u>	East Canyon	48.1	31.1	15.7	18.5
	Echo	73.9	34.4	21.0	20.9
	Lost Creek	20.0	14.6	8.6	13.2
	Rockport	60.9	51.9	19.2	33.6
	Willard Bay	193.3	165.2	100.5	146.2
COLORADO RIVER BASIN					
<u>Ashley Creek</u>	Steinaker	33.3	7.8	3.0	16.9
<u>Colorado</u>	Blue Mesa	829.5	727.8	220.8	--
	Lake Powell	25002.0	16,563.0	16,144.0	--
<u>Green</u>	Flaming Gorge	3749.0	2,825.1	2,079.1	--
<u>Lakefork</u>	Moon Lake	35.8	2.2	--	--
<u>Price River</u>	Scofield	65.8	39.4	17.7	27.1
<u>San Juan</u>	Navajo	1696.0	1,237.0	1,038.1	--
<u>San Rafael</u>	Huntington North	3.9	0.1	1.4	0.9
	Joe's Valley	54.6	40.7	35.7	35.7
	Mill Site	16.7	4.8	3.0	--
<u>Strawberry</u>	Starvation	165.3	123.0	103.3	--
<u>Uintah</u>	Bottle Hollow	11.3	**	9.7	--

\*\* = Data Delayed

+ = 15 year average period 1958-72

# UTAH PRECIPITATION DATA

1978 WATER YEAR

STATION NAME	OCT.-DEC.		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY-SEPT.		TOTAL
SERGEANT LAKES													6/21	32.02	9/25	5.22	37.24
SHINGL MIL FLT													7/10	37.70	9/27	6.63	44.33
SM+MUREHOUSE	12/27	9.50	1/24	3.26	2/27	3.12	3/27	4.12	4/26	4.60	5/24	4.64	6/23	.54	9/27	4.17	33.95
BEN LOMOND TRL			1/27	7.49	2/23	7.34	3/29	8.12	4/24	6.95	5/30	2.08	*		*		

## UTAH LAKE - JORDAN RIVER BASIN

BEAVER DIVIDE															9/21		26.71
CLEAR CR RDG 2	1/04	9.45	1/27	3.65	3/08	4.60	3/29	2.20	4/25	2.20	5/30	3.00	6/30	.12	9/28	3.04	26.26
DANIEL-STR SMT	12/27	10.43	1/24	5.00	2/27	4.70	3/29	5.80	4/25	3.25	5/30	2.55	6/22	.15	9/26	2.73	34.61
DUTCHMAN RS	12/27	11.05	1/24	7.45	2/27	6.60	3/29	7.80	4/25	4.00	5/30	3.10	*		9/29	2.70	
EAST PORTAL	12/30	9.93	1/30	4.56	2/28	3.74	3/30	4.47	5/01	4.38	6/01	1.46	7/01	.40	10/01	3.55	32.49
HOBBLE CK SMT	12/27	6.40	1/24	4.90	2/28	5.40	3/29	6.20	4/25	3.35	*	*	1/24	6/29	.00	9/28	1.70
LAKE CREEK													*			9/26	4.08
LAMBS CANYON	12/28	9.78	1/30	3.74	2/27	3.38	3/30	4.34	4/28	6.48	5/31	2.31			9/28	5.88	35.91
MIDDLE CANYON	*		1/28	4.90	2/25	4.20	3/31	6.60	4/29	6.00	5/31	3.60	*		9/29	5.75	
PAYSON RS	1/04	7.60	1/27	5.50	3/07	7.55	3/28	2.85	4/25	1.60	5/30	4.30	6/29	.15	9/28	3.10	32.65
ROCKY BASIN-SC							3/31	30.26	5/02	6.97	5/30	4.23	6/26	.20	9/30	6.10	47.76
SILVER LK BRIN	12/30	12.52	2/01	5.91	3/01	6.52	3/31	5.91	5/01	6.29	6/01	2.50	6/30	.48	10/01	6.69	46.82
SOAPSTONE RS	1/05	9.97	1/25	2.01	3/03	4.27	3/28	1.93	4/28	3.87	5/24	2.54	6/20	.22	9/27	1.93	26.74
TIMPANUGOS DIV	12/30	11.70	2/01	7.37	3/01	7.70	4/01	10.85	5/01	5.75	5/31	.90	7/01	.40	10/01	5.10	49.77
TRIAL LAKE	1/05	14.80	1/24	3.47	3/03	7.05	3/28	3.03	4/28	5.62	5/24	2.88	6/20	.55	9/21	3.10	40.50
VERNON CREEK	12/29	3.50	1/28	7.75	2/25	7.25	3/25	8.50	4/30	5.70	5/31	1.20	6/23	.00	9/29	5.25	39.15

## DUCHESNE - GREEN RIVER BASIN

ASHLEY TWIN LK															9/25		28.92
ATWOOD LAKE															9/26		23.77
BLACKS FK JCT			1/24	8.49	2/28	1.86	3/27	2.47	4/26	2.56	5/31	5.15	6/20	1.20	9/28	2.80	24.53
BROWN DUCK RDG			1/25	11.19			3/28	6.79	4/28	3.75	5/31	2.82			9/12	2.43	26.98
BUCK PASTURE											5/31	28.68			9/28	4.57	33.25
BURNT CREEK	12/30	2.75	1/30	1.20	2/27	1.30	3/31	2.45	4/27	3.03	6/02	4.77	6/30	.95	9/21	3.46	19.93
CHEPETA WTRUCK															9/26		23.96
CURRENT CREEK	12/29	6.30	1/24	3.33	2/27	3.40	3/29	3.95	4/25	2.40	5/30	1.30	6/22	.33	9/26	1.87	22.88
E FK BLACKS FK			1/24	8.93	2/28	2.00	3/27	2.88	4/26	2.52	5/31	5.05	6/20	1.40	9/28	2.60	25.38
FIVE POINT LK															9/15		29.36
GRIZZLY RIDGE	12/30	3.50	1/30	1.95	2/27	3.65	3/31	3.70	4/27	3.92	6/02	4.10	6/30	.20	9/21	6.10	27.12
HICKERSON PARK			1/24	4.10	2/28	1.20	3/27	2.26	4/28	2.40	5/31	5.45	6/30	1.41	9/21	2.57	14.39
HEWINTA GS			1/24	9.65	2/28	1.94	3/27	2.66	4/26	2.56	5/31	6.15	6/20	1.43	9/28	2.85	27.24
HIGHLINE TRAIL					2/28	10.48	3/27	3.05			5/31	9.72	6/29	1.35	9/25	5.35	29.95

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE(EXCEPT AS NOTED \*)

\*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST \* \*: Estimated

# UTAH PRECIPITATION DATA

1978 WATER YEAR

STATION NAME	OCT.-DEC.		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY-SEPT.		TOTAL
INDIAN CANYON	1/06	7.41	1/25	2.02	2/27	3.53	3/29	5.35	4/25	1.80	5/30	2.50	6/26	.32	9/27	1.35	24.28
JACKSON PARK			1/25	8.20			3/28	7.13	4/28	3.07	5/31	3.31			9/26	6.00	27.71
KIDNEY LAKES															9/26		29.09
KINGS CABIN UP			1/24	5.35	2/28	3.60	3/27	3.65	4/26	2.52	5/31	3.86	6/30	.34	9/21	5.19	24.51
LAKEFORK BASIN															9/13		39.64
LAKEFORK MTN 1			1/25	9.03	3/06	4.57	3/28	1.16	4/28	3.24	5/31	2.85	6/29	.48	9/26	2.80	24.13
LIGHTNING LAKE															9/13		43.88
MCCOY PARK															9/14		35.66
MOSBY MOUNTAIN			1/25	7.13	3/02	4.10	3/28	3.65	4/28	3.49	5/31	3.39	7/03	.55	9/13	2.77	25.08
PARADISE PARK			1/25	7.15	3/02	4.72	3/28	3.25	4/28	4.00	5/31	2.52	7/03	.68	9/26	3.87	26.19
REYNOLDS PARK															10/02		27.00
ROCK CREEK			1/25	7.90	3/06	4.38	3/28	1.04	4/28	2.91	5/31	2.00	6/28	.40	9/26	3.32	21.95
SHADOW LAKE															9/12		37.60
SPIRIT LAKE			1/24	6.25	2/28	3.12	3/27	2.90	4/28	3.72	5/31	5.75	6/30	1.55	9/26	4.35	27.64
STEEL CRK PARK															9/04		28.44
TROUT CREEK			1/24	4.72	2/28	3.10	3/27	3.05	4/26	2.55	5/31	4.70	6/29	.50	9/25	4.70	23.32
WINDY PARK															*		
W FK DUCHESNE													6/22	34.04	9/26	2.65	36.69

## PRICE - SAN RAFAEL - FREMONT RIVER BASINS

BLACKS FLAT-UM	1/05	6.42	1/30	3.95	2/24	3.05	3/31	4.70	4/28	1.50	5/23	3.50	7/05	.00	9/26	2.17	25.29
BUCKBOARD FLAT	12/29	3.32	1/30	3.99	2/27	4.31	3/28	4.10	4/28	1.80	5/31	2.03	6/30	.35	9/29	1.53	21.43
BUCK FLAT	1/03	9.75	1/24	4.80	3/06	8.10	3/28	3.00	4/26	2.40	5/30	4.00			10/11	3.33	35.38
CAMP JACKSON	12/29	3.42	1/30	7.40	2/27	5.08	3/28	5.85	4/28	2.01	5/31	2.25	6/30	.13	9/29	1.41	27.55
DILLS CAMP	1/03	8.28	1/24	4.55	3/04	5.90	3/28	4.30	4/26	2.00	5/30	3.20			9/26	3.35	31.56
FISH LAKE	1/05	4.70	1/30	3.40	2/24	2.40	3/31	4.00	4/28	1.00	5/23	2.00	6/30	.20	9/26	2.20	19.90
GOOSEBERY RES	1/04	11.44	1/27	6.05	3/02	5.90	3/30	6.25	4/26	3.90	5/30	3.50	6/29	.20	9/28	2.85	40.09
LASAL MTN UPK	12/30	6.12	1/31	5.70	2/28	4.45	3/29	6.03	4/29	3.72	5/30	1.94	6/29	.02	9/29	1.52	29.50
MUD CREEK	12/29	7.95	1/24	4.30	2/28	3.30	3/30	3.85	4/26	2.20	5/30	2.30					
ORANGE OLSEN	12/29	2.55	1/25	3.00	3/02	3.50	3/30	2.30	4/26	.30	5/30	1.70			9/28	.95	14.30
RED PINE RIDGE	12/29	10.83	1/24	5.30	3/02	6.15	3/30	4.70	4/26	2.30	5/30	3.90			9/28	2.18	35.36
STUART RS OLD	12/29	6.30	1/24	3.95			3/30	6.80	4/26	1.25	5/30	1.75			9/28	1.05	21.10
WHITE RIVER 1	12/29	7.80	1/24	3.35	2/27	2.55	3/29	4.60	4/25	1.60	5/30	2.25			9/27	1.77	23.92

## SEVIER - BEAVER RIVER BASINS

BEAVER DAMS	1/04	6.17	1/25	4.45	3/06	7.65	3/28	2.70	4/27	1.70	5/30	3.80	7/05	.00	9/26	2.30	26.77
BIG FLAT	1/05	4.78	1/30	8.35	2/24	4.15	3/27	10.00	4/28	3.10	5/23	3.60	7/10	.10	10/06	3.35	37.43
BOX CREEK	1/05	5.78	1/30	3.65	2/24	2.80	3/27	5.35	4/28	2.45	5/23	2.90	7/03	.15	9/26	2.60	25.68

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE(EXCEPT AS NOTED \*)

\*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST \* \*: Estimated



# UTAH PRECIPITATION DATA

1978 WATER YEAR

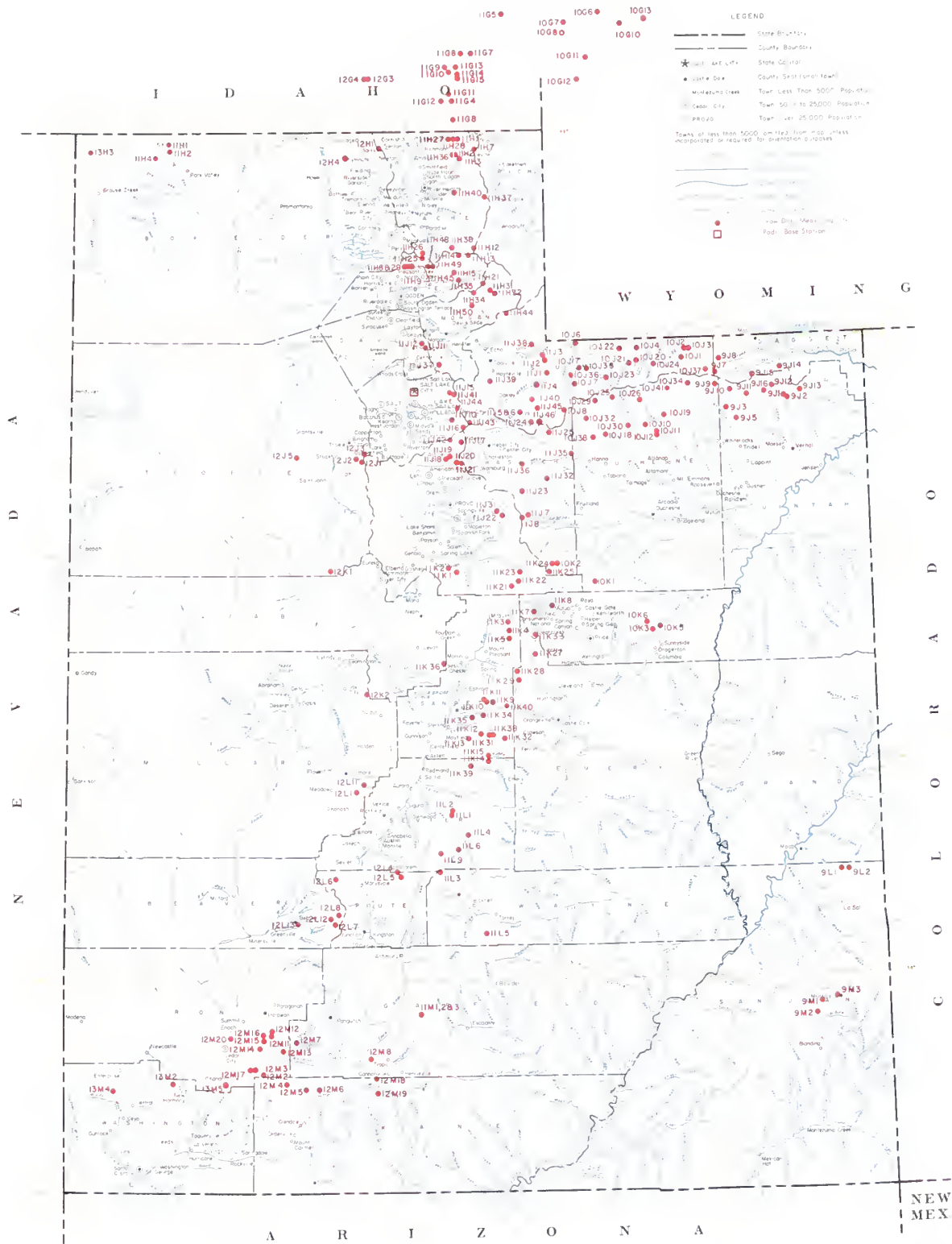
STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
CASTLE VALLEY	12/29 3.35	1/26 3.75	2/23 4.90	3/27 5.10	4/28 4.30	5/30 2.25	7/07 .07	9/28 3.06	26.78
DUCK CREEK RS	12/29 4.40	1/26 6.10	2/23 7.10	3/31 7.70	* * 6.86	* * 2.56		9/28 4.20	38.92
FARNSWORTH LK	1/05 7.85	1/30 3.35	2/24 4.05	3/30 5.75	4/28 2.80		7/03 4.90	9/27 3.10	31.80
GBRC HEADQTRS	1/03 9.05	1/27 5.00	3/07 6.80	3/28 3.35	4/27 2.70	5/30 2.30	7/01 .00	10/01 3.05	32.25
GBRC MAJORS	1/03 4.27	2/01 3.30	3/01 2.30	3/31 3.23	5/01 2.52	6/01 1.20	7/01 .03	10/01 2.37	19.22
GBRC MEADOWS	1/03 10.95	1/27 5.90	3/07 9.40	3/28 3.60		5/30 9.00	7/01 .10	10/01 3.70	42.65
GBRC OAKS	1/03 5.35	2/01 3.80	3/01 2.95	3/31 3.55	5/01 3.07	6/01 1.63	7/01 .04	10/01 2.75	23.14
GOOSEBERRY RS	1/05 6.45	1/30 3.40	2/24 2.50	3/30 5.60	4/28 2.30	5/23 3.50	7/03 .00	9/27 2.85	26.60
HI-TOP MTN							6/30 26.65	9/26 2.61	29.26
KIMBERLY MINE	1/05 7.05	1/27 5.15	2/24 3.25	3/27 6.50	4/28 4.00	5/23 4.10	7/11 .30	10/06 4.72	35.07
MAMMOTH RS	1/04 12.53	1/27 5.60	3/02 5.50	3/30 6.10	4/26 3.80	5/30 3.30	6/29 .20	9/28 3.05	40.08
MERCHANT VALLEY	1/05 5.95	1/27 6.20	2/24 3.63	3/27 9.42	4/28 3.15	5/23 2.80	7/10 .20	10/06 3.83	35.18
MIDWAY VALLEY	12/29 4.25	1/24 6.50	2/23 8.15	3/31 6.90	4/28 6.70	5/24 2.40		9/28 3.50	38.40
MT BALDY RS	1/04 8.00	1/25 5.30	3/06 9.20	3/28 4.00		5/30 7.10	7/05 .00	9/26 2.20	35.80
OAK CREEK	12/28 4.35			3/28 17.73	5/01 6.68		7/07 .00	9/29 4.02	32.78
PANGUITCH LAKE	12/29 2.00	* * 3.00	2/23 2.30	3/27 2.70	5/02 3.40	5/30 .60	7/07 .04	9/28 3.21	17.25
PICKLE KEG SPG								8/08	34.74
PINE CREEK	1/05 7.75	1/27 11.30	2/24 5.35	3/27 10.55	4/28 5.50	5/23 4.70	7/06 .15	9/27 5.93	51.23
REES FLAT	1/04 6.95			3/28 12.80	4/27 3.00	5/30 2.30	6/29 .10	9/27 2.85	28.00
SHINGLE MILL	12/28 3.28	2/01 7.12		3/28 8.65	5/03 4.40	6/01 2.18	7/05 .03	9/27 4.06	29.72
WIDTSOE-ESCL 3	12/27 3.39	1/27 3.95	2/27 4.71	3/31 4.63	4/28 2.20	5/30 2.10	7/05 .05	10/02 2.30	23.33

## COAL CREEK - VIRGIN - ESCALANTE RIVER BASINS

KOLUH CRYSTAL								8/17	42.13
LITTLE GRASSY	1/03 2.82	1/26 6.95	2/23 7.40	4/01 14.30	4/25 4.30	5/30 2.00		10/12 4.00	31.05
LONG FLAT	1/03 3.35	1/26 3.45	2/23 2.80	4/01 6.00	4/28 3.20	5/24 2.35		10/03 2.65	23.80
TALL POLES	12/28 2.85	1/25 5.60	2/27 4.15	4/03 7.10	4/25 2.55	5/24 2.85		9/28 3.50	28.60
WEBSTER FLAT	1/03 4.20	1/26 7.80	2/23 9.40	4/01 11.40	4/25 3.40	5/24 2.00		*	
YANKEE RESVR	12/29 2.50	1/26 5.00	2/23 3.70	3/27 3.30	4/28 3.70	5/23 2.90		9/28 2.40	23.50

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE (EXCEPT AS NOTED \*)

\*\* GAGE MOLESTED, DATA FOR THIS PERIOD LOST \* \*: Estimated



Source: National Atlas 1:1,000,000 Albers Equal-area projection (1973) used as source for base map and adapted for SCS use

ALBERS EQUAL AREA PROJECTION

# INDEX TO UTAH, BEAR & UPPER COLORADO RIVER BASINS

## GREAT BASIN DRAINAGE

UPPER BEAR RIVER (above Harer, Idaho)																									
10G11	W	Big Park	7	27N	117W	8,700	11J41P	U	Lamb's Canyon #2	21	15	3E	7,400	9J12ap	U	Windy Park	1	15	20E	9,400					
10J6P	U	Burts-Miller Ranch	19	3N	10E	7,900	12J3P	U	Middle Canyon	8	45	3W	7,000	DUCHESE RIVER											
10G7	U	CCC Camp x	9	29N	118W	7,500	12J44	U	Mill Creek	32	15	3E	6,500	10J41ap	U	Atwood Lake	13	4N	4W	10,500					
10J36p	U	Gold Hill	11	1N	9E	10,000	11J10	U	Mill D South Fork	18	25	3E	7,400	10J30PST	U	Brown Duck Ridge	8	2N	6W	10,800					
10J7PST	U	Hayden Park	25	1N	9E	9,400	12J1P	U	Rocky Basin-Settlement Canyon	30	45	2W	8,900	9J3p	U	Chapeta-Whiterocks Lakes	3	15	17E	10,300					
10G12	W	Kelly Ranger Station	13	26N	118W	8,200	11J16P	U	Silver Lake (Brighten)	35	25	3E	8,725	11J32MPST	U	Current Creek	31	15	10W	7,800					
10G175	W	LaBarge Guard Station x	7	30N	116W	9,000	11J42	U	Snaw Bird (Gad Valley)	18	35	3E	10,000	11J23MPST	U	Daniels-Strawberry Summit	20	25	12W	8,000					
10J35p	U	Lily Lake	34	2N	10E	9,300	12K1PST	U	Vernon Creek	21	105	5W	7,500	11J7P	U	East Portal	36	75	6E	7,560					
11J12PST	U	Monte Cristo R. S.	4	8N	4E	8,960	UPPER SEVIER RIVER (South of Richfield, Utah)										10J26ap	U	Five Point Lake	28	4N	5W	11,000		
10G10	W	Pinney LaBarge	19	29N	114W	8,820	12L4PST	U	Bax Creek	33	265	2W	9,800	10K1PST	U	Indian Canyon	2	115	10E	9,100					
10G6	W	Paisan Meadows x	29	30N	116W	8,500	12M8	U	Byrce Canyon	36	365	4W	8,000	10J19P	U	Jackson Park	23	3N	4W	11,300					
10G8P	W	Salt River Summit x	32	29N	118W	7,900	12M13PST	U	Castle Valley	23	365	8W	9,700	10J34p	U	Kidney Lake	28	5N	3W	11,000					
10G13MP	W	Snyder Basin x	15	29N	115W	8,400	12M4P	U	Duck Creek R. S.	11	385	8W	8,700	10J39P	U	Lake Basin	23	35	8W	10,800					
10J17P	U	Stillwater Camp	32	2N	10E	8,550	12M18	U	Farview	32	375	4W	8,200	10J25p	U	Lakefork Basin	13	4N	7W	11,100					
LOWER BEAR RIVER (below Harer, Idaho)										12M45PST	U	Harris Flat	385	24	385	7W	7,700	10J10PST	U	Lakefork Mountain	2	3	2N	5W	10,200
11H37pST	U	Bug Lake	18	11N	5E	7,950	11L9p	U	High-Tap Mountain	36	255	1E	11,400	10J11	U	Lakefork Mountain #2	17	2N	4W	8,900					
11H36p	U	Bunchgrass	5	13N	3E	8,400	12L6P	U	Kimberly Mine	11	275	5W	9,300	10J12	U	Lakefork Mountain #3	29	2N	4W	8,100					
11G11	I	Christensen Ranch	27	135	41E	5,600	12M42MPST	U	Midway Valley	26	375	9W	8,800	10J27ap	U	Lightning Lake	24	4N	8W	10,950					
11H38p	U	Chesman Creek	5	8N	3E	7,300	12M7P	U	Pangulitch Lake	4	5	365	7W	8,200	9J5PST	U	Mosby Mountain	9	25	18E	9,500				
12H1p	U	Clarkston Mountain	29	14N	2W	6,300	12M19	U	Rainbow Point	29	385	4W	9,100	9J3P	U	Paradise Park	7	3N	1E	10,100					
11G12	I	Cub River Ranger Station	5	155	41E	5,400	12L5	U	Squaw Springs	3	275	2W	9,300	10J18P	U	Rack Creek	21	2N	7W	7,900					
11G14a	I	Dry Basin	30	135	42E	7,900	11M4p	U	Widow R. S.	22	345	2W	7,600	10J22p	U	Shadow Lake	28	3N	8W	10,150					
12G4	I	Dry Creek Flat	31	135	37E	6,350	LOWER SEVIER RIVER (Including San Pitch River)										11J8PST	U	Strawberry Divide	34	35	75	6E	8,000	
11G2e	I	Emigrant Summit	21	125	42E	7,350	11K13P	U	Beaver Dam	27	195	3E	8,000	11J35P	U	West Fork of the Duchesne	2	1N	19E	10,250					
11G7	I	Emigrant Canyon (mouth)	24	125	42E	5,500	11L1PST	U	Beaverth Lake	27	33	235	2E	9,900	PRICE RIVER										
11G8MPST	I	Franklin Basin	1	165	41E	8,000	11K11P	U	G. R. C. Headquarters	21	175	4E	8,700	10K5M	U	Carroll	32	135	14E	8,200					
11H7MP	U	Garden City Summit	34 & 35	14N	4E	7,600	11K10P	U	G. R. C. Meadows	26 & 27	175	4E	10,000	11K8	U	Dry Valley Divide	20	125	8E	7,800					
11H4PST	U	George Peak	4	13N	4W	9,000	11L2PST	U	Gooseberry R. S.	22	235	2E	8,400	10K3M	U	Grassy Trail Creek-Left Fork	32	125	13E	7,970					
11H40p	U	Herd Hollow	3E	41N	3E	7,000	11K3MPST	U	Hammer R. S.-Cottonwood Creek	13	135	5E	8,800	11K7	U	Jones Ranch	2	145	13E	7,700					
11G15a	I	Horseshoe Basin	31	135	42E	8,000	11K34	U	Midvale	16	185	4E	9,600	11K3MP	U	Mud Creek	4	145	7E	8,300					
11H1MP	U	Klondike Narrows	10	14N	3E	7,400	11K12P	U	Mt. Baldy R. S.	19	195	4E	9,500	10K6	U	Timberline	28	135	13E	9,100					
11G13	I	Liberty Springs	7	135	42E	8,240	12K2P	U	Oak Creek	9	175	3W	7,760	11K24	U	White River #1	11	105	8E	8,550					
11H26	U	Little Bear (lower)	8N	15	6,000	11K39PST	U	Pickle Keg Springs	4	215	3E	9,600	11K25	U	White River #2	9	105	8E	7,600						
11H25PST	U	Little Bear (upper)	22	8N	1E	6,550	12L1P5	U	Pine Creek	24	225	4W	8,700	11K25	U	White River #3	30	105	8E	7,400					
12G3	I	Oxford Mountain	32	135	37E	6,800	11K36	U	Rees's Flat	20	155	2E	7,300	SAN RAFAEL RIVER											
11G5	I	Slug Creek Divide	15	105	44E	7,225	12L11P	U	Shingle Mill	5	225	3W	6,200	11K31PST	U	Buck Flat	23	195	4E	9,400					
11H27	U	Steep Hollow #1	7	14N	3E	8,500	11K35	U	Thistle Flat	23	185	3E	8,500	11K4P	U	Gooseberry Reservoir	25	135	5E	8,700					
11H28	U	Steep Hollow #2	9	14N	3E	7,700	BEAVER RIVER										11K5	U	Huntington-Horseshoe	12	145	5E	9,800		
11G9	I	Strawberry Creek	9	135	41E	5,800	12L13	U	Beaver Race Track	23	295	7W	6,020	11K40P	U	Orange Olsen	31	175	6E	7,300					
11G10	I	Strawberry Mink Divide	14	135	41E	6,800	12L7PST	U	Big Flat	18	295	4W	10,290	11K28PST	U	Red Pine Ridge	5	165	6E	9,400					
11H2PST	U	Tony Grove Lake	5	13N	3E	7,400	12L9PST	U	Merchant's Valley (upper)	8 & 9	295	5W	8,200	11K38	U	Rush Pond	24	195	4E	9,800					
11H5MP	U	Tony Grove Ranger Station	11	13N	3E	6,250	12L8	U	Otter Lake	1	295	5W	9,300	11K39PST	U	Seelye Creek	25	175	4E	10,000					
11G4P	I	Willow Flat	2	155	41E	6,100	PARROW CREEK										11K29	U	Sharr R. S.	8 & 9	155	7E	7,950		
OGDEN RIVER										12M16	U	Birch Crossing	23	355	9W	8,100	11K29	U	Upper Joe's Valley	21	165	6E	8,900		
11H14M	U	Beaver Creek-Skunk Creek	22	8N	3E	7,150	12M14	U	Brian Head	10	365	9W	10,000	11K32	U	Wigley Creek	27	195	5E	9,000					
11H8PST	U	Ben Lomand Peak	3	7N	1W	8,000	12M12	U	Ed Ward Flat	17	355	9W	8,300	MUDDY RIVER											
11H9PST	U	Ben Lomand (lower)	7N	1W	8,000	12M15P	U	Tail Poles	26 & 35	355	9W	8,800	11K14	U	Black's Fork	37	205	4E	9,200						
11H35p	U	Causey Dam	34	7N	3E	5,500	12M11P	U	Yankee Reservoir	20	355	8W	8,700	11K15PST	U	Dill's Camp	24	205	4E	9,200					
11H29	U	Cutler Creek	3	7N	1W	6,780	ENTERPRISE TO NEW HARMONY DRAINAGES										11L4P	U	Black's Flat-U. M. Creek	33	245	3E	9,250		
11H13MPST	U	Dry Bread Pond	19	8N	4E	8,230	13M4MP	U	Little Grassy Creek	15	385	17W	6,100	11L5	U	Dankey Reservoir	9	305	4E	9,800					
11H34p	U	Guilford's Peak	21	6N	4E	8,050	13M2MPST	U	Long Flat	2	385	14W	8,000	11L3P	U	Fish Lake	35	265	1E	8,700					
11H45p	U	Middle Park Ogden	16	7N	1E	8,420	COAL CREEK										11L6	U	Johnson Valley	24	255	2E	8,850		
11H49	U	Powder Mountain Hideaway	6	7N	2E	8,250	12M17	U	Cedar City Golf Course	11	365	11W	5,800	SOUTHEASTERN UTAH DRAINAGES											
11H48	U	Powder Mountain Sundown	1	7N	1E	8,400	12M17	U	SUSC Ranch	18	375	9W	8,200	9M1P	U	Buckboard Flat	36	335	22E	9,000					
11H15P	U	Sagebrush Flat	21	7N	3E	6,300	UPPER BEAR RIVER IN UTAH (above Duchesne River)										9M2P	U	Camp Jackson	22	345	22E	8,600		
WEBER RIVER										9L1	U	Grizzly Ridge	5	8	15	22E	8,500	9L2P	U	LaSal Mountain	5	275	24E	8,800	
11J24	U	Beaver Creek R. S.	28	25	7E	7,500	9J11aP	U	Ashley Twin Lakes	20	15	19E	10,500	9M3	U	LaSal Mountain (upper)	25	335	23E	7,050					
11J1PST	U	Chalk Creek #1	4	1N	8E	9,100	10J21P	U	Black's Fork G. S.-East Fork	25	2N	12E	9,300	ESCALANTE RIVER											
11J2MPST	U	Chalk Creek #2	29	2N	8E	8,200	10J22P	U	Black's Fork Junction	33	3N	12E	8,925	11M1	U	Widow-Escalante Summit	22	345	1W	9,500					
11J3MP	U	Chalk Creek #3	7	2N	8E	7,500	10J23a	U	Buck Pasture	14	1N	11E	9,700	11M2PST	U	Widow-Escalante #2	22	345	1W	9,500					
11J12P	U	Farlington Canyon (lower)	14	3N	1E	6,950	9J14P	U	Burnt Creek	4	1N	20E	7,900	11M3PST	U	Widow-Escalante #3	22	345	1W	9,500					
11J11PST	U	Farlington Canyon (upper)	26	3N	1E	8,000	9J13P	U	Crane Valley	15	8	15	22E	8,500	VIRGIN RIVER										
11H44p	U	Francis Canyon	29	5N	6E	7,400	10J24ap	U	Henry's Fork	45	29	2N	14E	10,000	13M5PST	U	Kalab-Crystal	2	385	11W	9,250				
11J45a	U	East Shingle Lake	6	3N	10W	9,800	10J4P	U	Hewinto G. S.	33	3N	13E	9,500	12M6	U	Long Valley Junction	22	385	6W	7,500					
11J37p	U	Hardscrabble	16	2N	2E	6,500	9J8P	U	Hickerson Park	24	2N	17E	9,100	12M3MPST	U	Webster Flat	20	375	9W	9,200					
11H21PST	U</																								

# Agencies Cooperating in Utah Snow Surveys

## U.S. GOVERNMENT AGENCIES

U.S. Department of Agriculture  
Soil Conservation Service  
Forest Service  
U.S. Department of Commerce  
NOAA, National Weather Service  
U.S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service

## STATE AGENCIES

Utah State University  
Utah Fish and Game Department  
Utah State Department of Natural  
Resources, Division of Water Rights  
Bear River Commissioner  
Price River Commissioner  
Provo River Commissioner  
Sevier River Commissioners  
Spanish Fork River Commissioner  
Utah Lake and Jordan River Commissioner

## MUNICIPALITIES

Manti  
Salt Lake City

## ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association  
Board of Canal Presidents - Jordan River  
Emery Canal and Reservoir Company  
Moan Lake Water Users Association  
Ogden River Water Users Association  
Provo River Water Users Association  
Strawberry Water Users Association  
Sevier River Water Users Association

## PRIVATE AGENCIES

Kaiser Steel Corporation



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
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## FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

*"The Conservation of Water begins  
with the Snow Survey"*